## 03040201-11

(Catfish Creek)

## **General Description**

Watershed 03040201-11 (formerly 03040201-150) is located in Dillon and Marion Counties and consists primarily of *Catfish Creek* and its tributaries. The watershed occupies 111,369 acres of the Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 36.4% agricultural land, 35.4% forested wetland, 18.6% forested land, 6.5% urban land, 2.6% scrub/shrub land, 0.3% nonforested wetland, and 0.2% water.

Catfish Canal receives drainage from Stackhouse Creek (Boggy Branch) and flows through Catfish Swamp near the City of Marion. Collins Creek accepts drainage from Smith Swamp (Grassy Bay, Rabbit Bay, Tenmile Bay, Little Horsepen Bay, Big Horsepen Bay, Middle Bay, Wolfpit Bay) and joins Catfish Canal to form the headwaters of Catfish Creek. Catfish Creek then accepts drainage from Flat Swamp, Pitch Pot Swamp (Millrace Stream, Keedley Swamp, Wiggins Swamp), Mink Creek, and Beverly Swamp. The Catfish Creek Watershed drains into the Great Pee Dee River. There are a total of 150.2 stream miles and 67.1 acres of lake waters in this watershed. Catfish Creek and Smith Swamp are classified FW\* (dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.5) and the remaining streams in the watershed are classified FW.

# **Surface Water Quality**

Station #	<b>Type</b>	Class	<u>Description</u>
PD-320	S/W	FW*	SMITH SWAMP AT S-34-19 1 MI E OF MARION
PD-187	P/W	FW*	SMITH SWAMP AT US 501 1.9 MI SSE OF MARION
PD-097	S/INT	FW*	CATFISH CREEK AT S-34-34 6 MI SW OF MARION

Smith Swamp – There are two SCDHEC monitoring sites along Smith Swamp. This is a blackwater system, characterized by naturally low dissolved oxygen conditions. Although dissolved oxygen excursions occurred at both sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. At the upstream site (*PD-320*), aquatic life uses are fully supported. Significant decreasing trends in five-day biological oxygen demand, turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. At the downstream site (*PD-187*), aquatic life uses are fully supported. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biological oxygen demand, turbidity, and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

*Catfish Creek (PD-097)* – Aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen

concentration. Significant decreasing trends in turbidity and total nitrogen concentration suggest improving conditions for these parameters. DDE (a metabolite of DDT) was detected in the 2001 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are fully supported.

## **NPDES Program**

**Active NPDES Facilities** 

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

COMMENT

CATFISH CANAL SCG645023

TRICO/FRED HYATT WTP MINOR DOMESTIC

PIPE #: 001 FLOW: MR

CATFISH CANAL SCG130002

AL WILLIAMS ENTERPRISE MINOR INDUSTRIAL

PIPE #: 001-007 FLOW: M/R

BOGGY BRANCH SCG730559

WEAVER CO./BAXLEY PIT MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R

SMITH SWAMP SCG730072

BAKER BROTHERS/FOXWORTH MINE MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R

SMITH SWAMP SCG730616

MARION COUNTY/BOBBY MACE PIT MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R

SMITH SWAMP TRIBUTARY SCG250108

ARVIN AVM INC. MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R

BOGGY BRANCH SCG730984

RE GOODSON MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R

## Nonpoint Source Management Program

Land Disposal Activities
Landfill Facilities

LANDFILL NAME PERMIT #
FACILITY TYPE STATUS

CITY OF MARION DUMP ------MUNICIPAL CLOSED

CITY OF MARION C&D LANDFILL 341003-1201 CONSTRUCTION ACTIVE

CITY OF MARION 341003-3001 COMPOSTING ACTIVE

TOWN OF LATTA 171002-3001 COMPOSTING ACTIVE

TOWN OF PEE DEE #2 ------MUNICIPAL INACTIVE

Mining Activities

MINING COMPANY PERMIT #
MINE NAME MINERAL

MARION COUNTY 0298-67
BOBBY MACE BORROW PIT SAND/CLAY

CITY OF MARION 1131-67
COLEMAN MINE SAND/CLAY

BAKER BROTHERS OF GRESHAM, INC. 1134-67 FOXWORTH PIT SAND/CLAY

### **Growth Potential**

There is a low to moderate potential for growth in this watershed, which contains the City of Marion and is adjacent to the Town of Latta. Commercial development is limited to Marion and portions of U.S. Hwy. 76, particularly east of Marion at the U.S. Hwy. 501 Bypass. Industrial development occurs along U.S. Hwy. 76 and the U.S. Hwy. 501 Bypass near Marion. This watershed also contains the Marion Industrial Park and the Latta Industrial Park. U.S. Hwy. 76 and the U.S. Hwy. 501 Bypass are four-lane major highways that serve as major access corridors to the Grand Strand and will increase in traffic and development. Water service is provided from the City of Marion and the Marion County Rural Water Company and covers most of the watershed. Sewer service is available to the areas in and around the City of Marion and the Town of Latta.

### **Watershed Restoration and Protection**

### Total Maximum Daily Loads (TMDLs)

A TMDL was developed by SCDHEC and approved by EPA for *Smith Swamp* water quality monitoring sites *PD-187* and *PD-320* to determine the maximum amount of fecal coliform bacteria they can receive and still meet water quality standards. Fecal coliform sources typical of urban areas are expected and include human sources of fecal coliform such as leaking sewers, SSOs, and failing septic systems. Non-human sources such as swine, wildlife, and pets are expected to be low to moderate in this watershed. The TMDL states that a 66% reduction in fecal coliform loading at PD-187 and a 68% reduction at PD-320 is necessary for the stream to meet the water quality standard.